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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,823	05/08/2007	Rika Koyama	082420-000100US	7217

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TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER	
LENNOX, NATALIE	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/581,823	KOYAMA, RIKA	
	Examiner	Art Unit	
	NATALIE LENNOX	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 9-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to claims 9-11, applicant claims a computer program. Computer programs *per se* are not physical "things," they are neither computer components nor statutory processes, as they are not "acts" being performed. In other words, computer programs per se are nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture or composition of matter. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-

readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1, 6, and 9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 of copending Application No. 10/581,822. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant application claims are broader in every aspect than the copending application and are therefore an obvious variant thereof.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Instant Application	Application 10/581,822
Claims 1, 6, and 9. An audio device control device, method, and computer program comprising:	Claims 1, 6, and 7. A device control device, method, and computer program comprising:
speech recognition means which acquires speech data representing a speech, and specifies a candidate for a	speech recognition means that acquires speech data representing a speech, and performs speech recognition on said speech

phrase represented by said speech by performing speech recognition on said speech data;	data, thereby specifying a candidate for a phrase represented by said speech;
operational status information acquisition means which acquires operational status information indicating an operational status of an audio device to be controlled;	data indicating statuses of a plurality of external devices to be controlled
audio device control means which specifies a use mode of said audio device desired by an utterer of said speech, based on the candidate specified by said speech recognition means, and an operation to be applied to said audio device to realize said use mode, based on the operational status information acquired by said operational status information acquisition means, and controls said audio device to apply the specified operation.	device control means that specifies a variable to be changed to obtain a result desired by an utterer of said speech, a direction in which said variable is to be changed, and a device which is to be controlled to change said variable, based on said candidate specified by said speech recognition means and data indicating statuses of a plurality of external devices to be controlled, and controls said specified device in such a way as to change said specified variable in said specified direction, wherein said device control means

	controls a device when a number of devices which are controllable in such a way as to change said specified variable in said specified direction is one, and when there are a plurality of devices controllable in such a way as to change said specified variable in said specified direction, specifies which one of said controllable devices is desired to be operated based on a candidate specified by further acquisition of speech data by said speech recognition means, and controls said specified device.
(Claim 1, 6, and 9.) audio device control means which specifies a use mode of said audio device desired by an utterer of said speech, based on the candidate specified by said speech recognition means, and an operation to be applied to said audio device to realize said use mode, based on the operational status information acquired by said operational	Claim 2. The device control device according to claim 1, wherein when there are a plurality of devices controllable in such a way as to change said specified variable in said specified direction, said device control means outputs data prompting determination of which one of said controllable devices is desired to be operated.

status information acquisition means, and controls said audio device to apply the specified operation.	
(Claims 1, 6, and 9.) audio device control means which specifies a use mode of said audio device desired by an utterer of said speech, based on the candidate specified by said speech recognition means, and an operation to be applied to said audio device to realize said use mode, based on the operational status information acquired by said operational status information acquisition means, and controls said audio device to apply the specified operation.	Claim 3. The device control device according to claim 1, wherein said candidate specified by said speech recognition means represents rise or lower, one of said plurality of controllable devices is an audio device, and a variable to be changed is a volume, and another device is a power window, and a variable to be changed is an opening/closing amount of a window.
(Claims 1, 6, and 9.) audio device control means which specifies a use mode of said audio device desired by an utterer of said speech, based on the candidate specified by said speech recognition means, and an operation to be applied to said audio device to realize said use	Claim 4. The device control device according to claim 1, wherein said candidate specified by said speech recognition means represents rise or lower, one of said plurality of controllable devices is an air conditioner, and a variable to be changed is a temperature, and another

mode, based on the operational status information acquired by said operational status information acquisition means, and controls said audio device to apply the specified operation.	device is a power window, and a variable to be changed is an opening/closing amount of a window.
(Claims 1, 6, and 9.) audio device control means which specifies a use mode of said audio device desired by an utterer of said speech, based on the candidate specified by said speech recognition means, and an operation to be applied to said audio device to realize said use mode, based on the operational status information acquired by said operational status information acquisition means, and controls said audio device to apply the specified operation.	Claim 5. The device control device according to claim 1, wherein said candidate specified by said speech recognition means represents rise or lower, one of said plurality of controllable devices is air conditioner, and a variable to be changed is a temperature, and another device is an audio device, and a variable to be changed is a volume.

More specifically, as for the limitation "data indicating statuses of a plurality of external devices to be controlled" as provided in claims 1, 6, and 7 of the copending application 10/581,822, it would have been obvious to a person having ordinary skill in the art that in claims 1, 6, and 9 of the instant application the "operational status information acquisition means which acquires operational status information indicating

an operational status of an audio device to be controlled," is not significantly distinct from the instant application given that "an audio device to be controlled" is based on "the candidate specified by said speech recognition means" which suggests that the specific devices to be controlled depends on what the utterer desires and specified to the speech recognition means.

As for the "device control means" of claims 1, 6, and 7 of the copending application 10/581,822, it would have been obvious to a person having ordinary skill in the art that the "audio device control means" of claims 1, 6, and 9 of the instant application based on the "candidate specified by said speech recognition means" suggests that the specific device to be controlled depends on what the utterer desires and specified to the speech recognition means, and also that the specification of "a variable to be changed to obtain a result desired by an utterer of said speech" and "a direction in which said variable is to be changed" as provided by copending application 10/581,822 does not differ from specifying "a use mode of said audio device desired by an utterer of said speech," as provided in the instant application, given that the "use mode" suggests referring to a function or control command to be applied to the device, which causes a variable to change in the device.

As for claim 2 of the copending application 10/581,822, it would have been obvious to a person having ordinary skill in the art that the "audio device control means" of the instant application based on the "candidate specified by said speech recognition means" suggests that the specific device to be controlled depends on what the utterer desires and specified to the speech recognition means, and also that the specification of

"a variable to be changed to obtain a result desired by an utterer of said speech" and "a direction in which said variable is to be changed" as provided by copending application 10/581,822 does not differ from specifying "a use mode of said audio device desired by an utterer of said speech," as provided in the instant application, given that the "use mode" suggests referring to a function or control command to be applied to the device, which causes a variable to change in the device. Further, it would have also been obvious to a person having ordinary skill in the art that "said device control means outputs data prompting determination of which one of said controllable devices is desired to be operated," as provided by the copending application 10/581,822, does not differ from the "audio device control means" of the instant application which states that "an audio device to be controlled" is based on "the candidate specified by said speech recognition means" which suggests that the specific devices to be controlled depends on what the utterer desires and specified to the speech recognition means.

As for claims 3 to 5 of copending application 10/581,822, it would have been obvious to a person having ordinary skill in the art that "a variable to be changed to obtain a result desired by an utterer of said speech" and "a direction in which said variable is to be changed" as provided by copending application 10/581,822 does not differ from specifying "a use mode of said audio device desired by an utterer of said speech," as provided in the instant application, given that the "use mode" suggests referring to a function or control command to be applied to the device, which causes a variable to change in the device, including raising or lowering a variable as well as turning on or off, changing tracks, pausing, playing, raising or lowering a temperature,

window, or volume, among other functionalities or variables that are well known for controlling devices.

It is noted that the instant application claims an "audio device control" and that the copending application 10/581,822 claims a "device control," however, it would have been obvious to a person having ordinary skill in the art that the "audio device control" is an obvious variant of the "device control" of the copending application because they are both device controls that perform the functions specified by a user.

5. Claims 2 and 7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3 and 8 of copending Application No. 10/581,589. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are substantially similar in scope, both claiming device control devices and methods which are obvious variants.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Instant Application	Application 10/581,589
Claims 2 and 7. An audio device control device and method comprising:	Claims 3 and 8. An air conditioner control device comprising:
speech recognition means which acquires speech data representing a speech, and specifies a candidate for a phrase represented by said speech by performing	speech recognition means (2) which acquires speech data representing a speech, and specifies a candidate of a phrase represented by said speech by

speech recognition on said speech data; and	performing speech recognition on said speech data; and
audio device control means which specifies a use mode of an external audio device desired by an utterer of said speech, and an operation to be applied to said audio device to realize said use mode, based on the candidate specified by said speech recognition means, and environmental data indicating a circumstance of an environment under which said audio device is used, and/or operational status data indicating an operational status of said audio device, and controls said audio device to apply the specified operation.	air conditioner control means (6) which specifies a variable to be changed for obtaining a condition desired by an utterer of said speech and/or a direction in which said variable should change, based on a candidate specified by said speech recognition means (2), environmental data indicating a condition of an environment under which a conditioning by an external air conditioner (51) is performed and/or operational status data indicating an operational status of said air conditioner (51), and controls said air conditioner (51) in such a way that a specified variable changes in a specified direction.

As for claims 3 and 8 of the copending application 10/581,859, it would have been obvious to a person having ordinary skill in the art that "a variable to be changed for obtaining a condition desired by an utterer of said speech and/or a direction in which said variable should change" as provided by copending application 10/581,859 does not

differ from specifying "a use mode of said audio device desired by an utterer of said speech," as provided in claims 2 and 7 of the instant application, given that the "use mode" suggests referring to a function or control command to be applied to the device, which causes a variable to change in the device according to the candidate specified by the utterer.

It is noted that the instant application claims an "audio device control" and that the copending application 10/581,822 claims an "air conditioner control," however, it would have been obvious to a person having ordinary skill in the art that the "audio device control" is an obvious variant of the "air conditioner control" of the copending application because they are both device controls that perform the functions specified by a user.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Geilhufe et al., hereinafter Geilhufe (US Patent 6,584,439).

As per claims 1, 6, and 9, Geilhufe teaches an audio device control device, method, and computer program comprising:

speech recognition means which acquires speech data representing a speech, and specifies a candidate for a phrase represented by said speech by performing speech recognition on said speech data (Col. 10, lines 1-10);

operational status information acquisition means which acquires operational status information indicating an operational status of an audio device to be controlled (Col. 9, lines 11-22 and 40-51.); and

audio device control means which specifies a use mode of said audio device desired by an utterer of said speech, based on the candidate specified by said speech recognition means, and an operation to be applied to said audio device to realize said use mode, based on the operational status information acquired by said operational status information acquisition means, and controls said audio device to apply the specified operation (Col. 17, line 60 to Col. 18, line 13, and Col. 13, lines 22-35).

As per claims 2, 7, and 10, Geilhufe teaches an audio device control device, method, and computer program comprising:

speech recognition means which acquires speech data representing a speech, and specifies a candidate for a phrase represented by said speech by performing speech recognition on said speech data (Col. 10, lines 1-10); and

audio device control means which specifies a use mode of an external audio device desired by an utterer of said speech, and an operation to be applied to said audio device to realize said use mode, based on the candidate specified by said speech recognition means, and environmental data indicating a circumstance of an environment

under which said audio device is used, and/or operational status data indicating an operational status of said audio device, and controls said audio device to apply the specified operation (Col. 17, line 60 to Col. 18, line 13, and Col. 9, lines 11-22 and 40-51, also Col. 11, line 61 to Col. 12, line 22, more specifically Col. 12, lines 10-17, and Col. 13, lines 22-35).

As per claims 3, 8, and 11, Geilhufe teaches an audio device control device, method, and computer program comprising:

speech recognition means which acquires speech data representing a speech, and specifies a candidate for a phrase represented by said speech by performing speech recognition on said speech data (Col. 10, lines 1-10);

utterer specification means which specifies an utterer of said speech or an attribute of the utterer based on said speech data (Col. 18, lines 38-47);

audio device control means which specifies a use mode of an external audio device desired by the utterer of said speech, and an operation to be applied to said audio device to realize said use mode, based on the candidate specified by said speech recognition means, the utterer or the attribute thereof specified by said utterer specification means, and environmental data indicating a circumstance of an environment under which said audio device is used, and/or operational status data indicating an operational status of said audio device, and controls said audio device to apply the specified operation (Col. 17, line 60 to Col. 18, line 13, and Col. 9, lines 11-22

and 40-51, also Col. 11, line 61 to Col. 12, line 22, more specifically Col. 12, lines 10-17, and Col. 18, lines 38-47, and Col. 13, lines 22-35).

As per claim 4, Geilhufe teaches the audio device control device according to claim 2, wherein said environmental data comprises data indicating a current location of the environment under which said audio device is used, or data indicating a sound insulation circumstance of the environment under which said audio device is used (Col. 28, lines 47-50, Col. 29, lines 3-7, Col. 31, lines 29-33, Col. 32, lines 8-10, and Col. 11, lines 47-50).

As per claim 5, Geilhufe teaches the audio device control device according to claim 3, wherein said environmental data comprises data indicating a current location of the environment under which said audio device is used, or data indicating a sound insulation circumstance of the environment under which said audio device is used (Col. 28, lines 47-50, Col. 29, lines 3-7, Col. 31, lines 29-33, Col. 32, lines 8-10, and Col. 11, lines 47-50).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Buchner et al. (US 2002/0069063) provides a speech recognition control of remotely controllable devices in a home network environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATALIE LENNOX whose telephone number is (571)270-1649. The examiner can normally be reached on Monday to Friday 9:30 am - 7 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NL 04/15/2008
/Richemond Dorvil/
Supervisory Patent Examiner, Art Unit 2626